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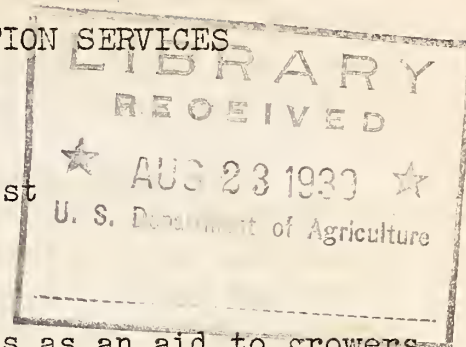
UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

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TOBACCO INSPECTION, MARKET NEWS, AND DEMONSTRATION SERVICES

(Flue-cured)

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Inspection of tobacco according to standard grades as an aid to growers in marketing their crop was inaugurated in 1929. This service is now about 8 years old, but the work has been conducted on such a limited scale that most tobacco growers are still unfamiliar with what the service is, how it is conducted, and how it can be of dollars-and-cents value to them.

Reasons for the inspection and market news services are readily understood by every farmer who has sold a split lot of tobacco for two widely different prices, or has taken in a basket and resold it on the same floor for possibly twice or three times the first price. Every tobacco grower knows there is much uncertainty about the price any basket of tobacco will bring, and that there is a wide range in the prices paid for tobaccos of the same quality. He knows that often he has lost money because he was on the short end of that price range.

Inspection and market news services have been developed to provide a measuring stick for quality and price in order that growers may protect themselves against loss in the sale of their tobacco.

The inspection service undertakes the inspection and certification of the grade of tobacco, before sale, at auction markets. Packed tobacco is also inspected and the grade is certified upon application by interested parties.

The United States Department of Agriculture, cooperating with State agencies, has made tobacco inspection service and tobacco price reports available to growers at a few markets, to determine whether by informing growers as to the grade and current market price of tobacco, basket by basket, the auction-market system would be improved and the wide range in prices paid to growers for the same grade of tobacco would be reduced.

Its value as an aid to growers in marketing tobacco has been fully demonstrated. Although prior to 1936 a small fee was charged for tobacco inspection, during the years 1931 to 1935, inclusive, from 108 million to 186 million pounds of farmers' tobacco were sold annually under standard grades on auction markets. The Tobacco Inspection Act now makes it possible to expand the service and make it available to growers without charge. The Act provides for three distinct services - demonstration, inspection, and market news.

*Originally issued in June 1937 by the Bureau of Agricultural Economics.

The demonstration service is educational. It acquaints farmers with the objects of inspection and market news and how these services can best be used, and instructs them in the better preparation of tobacco for market so that it may sell at the highest price consistent with quality.

This work is accomplished through practical demonstrations on farms and through farmers' meetings. In cooperation with Departments of Vocational Education, agricultural teachers are given special training so that tobacco marketing may be taught in rural high schools. Agricultural Colleges, county agents, vocational teachers of agriculture, Chambers of Commerce, and other civic and farm organizations further the service.

Standard Grades for Flue-cured Tobacco

That the operations of the tobacco inspection service may be understood, it is necessary to have some knowledge of the system of grades used in classifying tobacco according to Federal standards. These grades are not difficult to understand.

Grades for tobacco are determined by the simple process of division and subdivision until a point is reached at which further subdivision is neither essential nor desirable. Each final subdivision is called a grade. The first division is made on the basis of distinct characteristics of tobacco caused by varieties, soils, climate, and methods of cultivation, harvesting, and curing. Each major division, based on distinct characteristics caused by these conditions, is called a class (See Brief of Classification of Leaf Tobacco - page 3 & fig. 1).

Each class is then subdivided into types. A type is defined as a division of a class of tobacco having certain common characteristics which permit its being divided into a number of related grades. Tobacco that has the same characteristics and corresponding qualities, colors, and lengths is treated as a type. Classes and types are necessarily based on rather broad distinctions.

The next subdivision breaks down each type into groups, or groups of grades. In the case of those types usually sold at auction, the group divisions are closely related to the position of the leaves on the plant. The trade terms for each group, except Wrappers, may vary with each class of tobacco and sometimes for types of a class.

It will be seen by referring to Figure 2 that the normal groups for Flue-cured tobacco are Lugs, Cutters, and Leaf. In crops of superior quality a fourth group known as Wrappers is selected. Wrappers may be from either the Leaf or the Cutter groups. In Flue-cured tobacco most of the Wrappers are produced in certain parts of the Old Belt. In these areas the plants are generally topped low and the crop is usually harvested by cutting the whole plant rather than by priming the leaves as is done in other Flue-cured districts where farmers aim at the production of tobacco suitable for smoking purposes.

BRIEF OF CLASSIFICATION OF LEAF TOBACCO

(Covering classes and types of tobacco)

CLASS 1—FLUE-CURED TYPES

Type 11: That type of flue-cured tobacco commonly known as Old Belt Flue-cured, Western District Bright or Flue-cured, Bright Virginia Leaf, Western North Carolina Bright, Middle Belt Flue-cured, or Semi-old Belt Flue-cured; and produced principally in the Piedmont sections of Virginia and North Carolina.

Type 12: That type of flue-cured tobacco commonly known as Eastern Flue-cured, New Belt of North Carolina Flue-cured, Eastern District Bright, or Eastern Carolina Bright; and produced principally in the coastal section of North Carolina, north of the South River.

Type 13: That type of flue-cured tobacco commonly known as Southeastern Flue-cured, Southeastern Bright, South Carolina Flue-cured, or New Belt of South Carolina and Southeastern North Carolina; and produced principally in the coastal sections of South Carolina and the southeastern counties of North Carolina, south of the South River.

Type 14: That type of flue-cured tobacco commonly known as Southern Flue-cured, Southern Bright, Southern District Bright, New Belt of Georgia and Florida, Florida Bright, Alabama Bright, or Georgia Flue-cured; and produced principally in the southern sections of Georgia and to some extent in Florida, Alabama, and Mississippi.

CLASS 2—FIRE-CURED TYPES

Type 21: That type of fire-cured tobacco commonly known as Eastern Fire-cured, Virginia Fire-cured, Smoked, or Dark Fired, or Dark Virginia; and produced principally in the Piedmont and mountain sections of Virginia.

Type 22: That type of fire-cured tobacco commonly known as Eastern District Fire-cured, Clarksville, Hopkinsville, and Springfield Fire-cured or Dark-fired, or Kentucky-Tennessee Broadleaf; and produced principally in a section east of the Tennessee River, in southern Kentucky and northern Tennessee.

Type 23: That type of fire-cured tobacco commonly known as Western Fire-cured, Mayfield and Paducah Dark-fired, or Western District Dark; and produced principally in a section between the Tennessee, Ohio, and Mississippi Rivers in western Kentucky and northwestern Tennessee.

Type 24: That type of fire-cured tobacco commonly known as Northern Fire-cured, Henderson Dark-fired or Smoked, the Stemming District, or Madisonville Dark or Dark-fired, including the fire-cured of the Owensboro district; and produced principally in the Henderson district of Kentucky.

CLASS 3—AIR-CURED TYPES

Type 31: That type of air-cured tobacco commonly known as Burley, Burley Air-cured, Red Burley, White Burley, or Light Air-cured of Kentucky; and produced principally in central and northeastern Kentucky, southern Ohio and Indiana, western West Virginia, central and eastern Tennessee, and sections of Virginia, North Carolina, Missouri, and Arkansas.

Type 32: That type of air-cured tobacco commonly known as Southern Maryland tobacco, Maryland Air-cured, or Maryland Export; and produced principally in southern Maryland.

Type 35: That type of air-cured tobacco commonly known as One-sucker, One-sucker Air-cured, Kentucky-Tennessee One-sucker, Indiana One-sucker, or Dark Air-cured One-sucker, including the Upper Cumberland District One-sucker; and produced principally in northern Tennessee, south central Kentucky, and southern Indiana.

Type 36: That type of air-cured tobacco commonly known as Green River, Green River Air-cured, Henderson District Air-cured, Dark Air-cured of Owensboro, or Owensboro District Air-cured; and produced principally in the Green River Section of Kentucky, in both the Owensboro and Henderson districts.

Type 37: That type of air-cured or sun-cured tobacco commonly known as Virginia Sun-cured, Virginia Sun and Air-cured, or Dark Virginia Air-cured; and produced principally in the central section of Virginia, north of the James River.

CLASS 4—CIGAR FILLER TYPES

Type 41: That type of cigar-leaf tobacco commonly known as Pennsylvania Seedleaf, Pennsylvania Broadleaf, Pennsylvania Filler Type, or Lancaster and York County Filler Type; and produced principally in Lancaster County, Pa., and the adjoining counties.

Type 42: That type of cigar-leaf tobacco commonly known as Gebhardt, Ohio Seedleaf, or Ohio Broadleaf; and produced principally in the Miami Valley section of Ohio and extending into Indiana.

Type 43: That type of cigar-leaf tobacco commonly known as Zimmer, Ohio Zimmer, or Zimmer Spanish; and produced principally in the Miami Valley section of Ohio and extending into Indiana.

Type 44: That type of cigar-leaf tobacco commonly known as Dutch, Shoestring Dutch, or Little Dutch; and produced principally in the Miami Valley section of Ohio.

Type 45: That type of cigar-leaf tobacco commonly known as Georgia and Florida Sun-grown Cigar-leaf, or the Georgia and Florida Filler Type; and produced principally in southwestern Georgia and the central part of northern Florida.

Type 46: That type of cigar-leaf tobacco commonly known as Puerto Rican Sun-grown or the Puerto Rican Filler Type, including Primed (Deshojado) and Stalk-cut (Manojo); and produced in Puerto Rico.

CLASS 5—CIGAR BINDER TYPES

Type 51: That type of cigar-leaf tobacco commonly known as Connecticut Broadleaf or Connecticut Valley Broadleaf; and produced principally in the Connecticut Valley sections of Connecticut and Massachusetts.

Type 52: That type of cigar-leaf tobacco commonly known as Connecticut Valley Havana Seed, Connecticut Havana Seed, Primed Havana, or Stalk-cut Havana; and produced principally in the Connecticut Valley sections of Connecticut and Massachusetts.

Type 53: That type of cigar-leaf tobacco commonly known as York State Tobacco, Havana Seed of New York, or the Binder Type of New York and Pennsylvania; and produced principally in the Big Flats and Onondaga sections of New York State, and extending into Pennsylvania.

Type 54: That type of cigar-leaf tobacco commonly known as Southern Wisconsin Cigar Leaf or Southern Wisconsin Binder Type; and produced principally south and east of the Wisconsin River, and extending into Illinois.

Type 55: That type of cigar-leaf tobacco commonly known as Northern Wisconsin Cigar Leaf, or Northern Wisconsin Binder Type; and produced principally north and west of the Wisconsin River and to some extent in Minnesota.

CLASS 6—CIGAR WRAPPER TYPES

Type 61: That type of cigar-leaf tobacco commonly known as Northern Shade, Connecticut Valley Shade-grown, or Shade of Connecticut; and produced principally in the Connecticut Valley sections of Connecticut and Massachusetts.

Type 62: That type of cigar-leaf tobacco commonly known as Southern Shade, Georgia and Florida Shade-grown, or Shade of Georgia and Florida; and produced principally in southwestern Georgia and in the central part of northern Florida.

MISCELLANEOUS TYPES OF DOMESTIC TOBACCO

Type 71: Ohio Flue-cured and Fire-cured, (known as Eastern Ohio.)

Type 72: Louisiana Perique.

Type 73: All other domestic types of tobacco not otherwise classified.

FOREIGN TYPES

Type 81: Cuba. (Havana.)

Type 82: Sumatra and Java.

Type 83: Philippine Islands. (Manila.)

Type 84: Other Foreign-grown Cigar-Leaf.

Type 90: Foreign-grown cigarette tobacco. (Turkish and other.)

TOBACCO-GROWING DISTRICTS

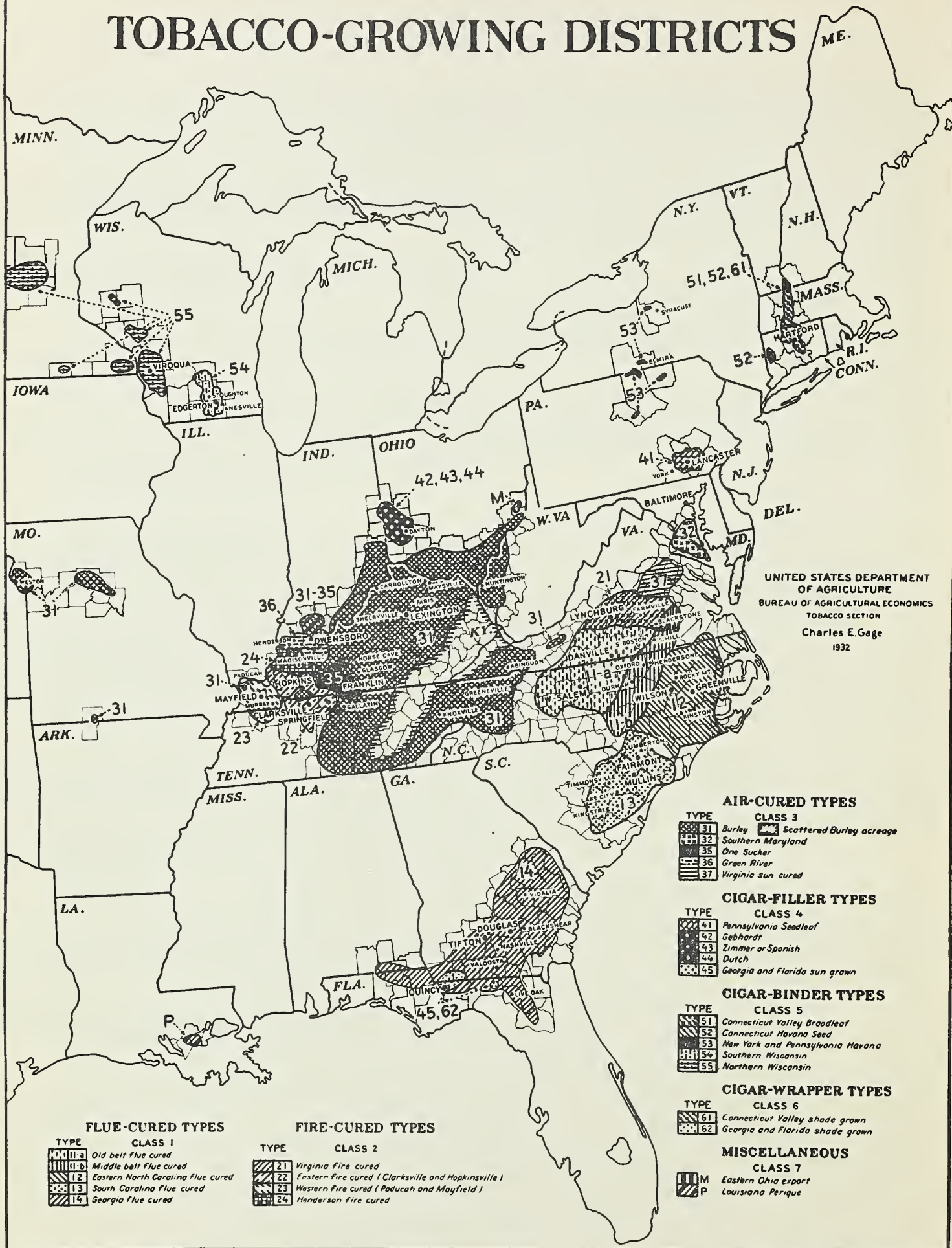
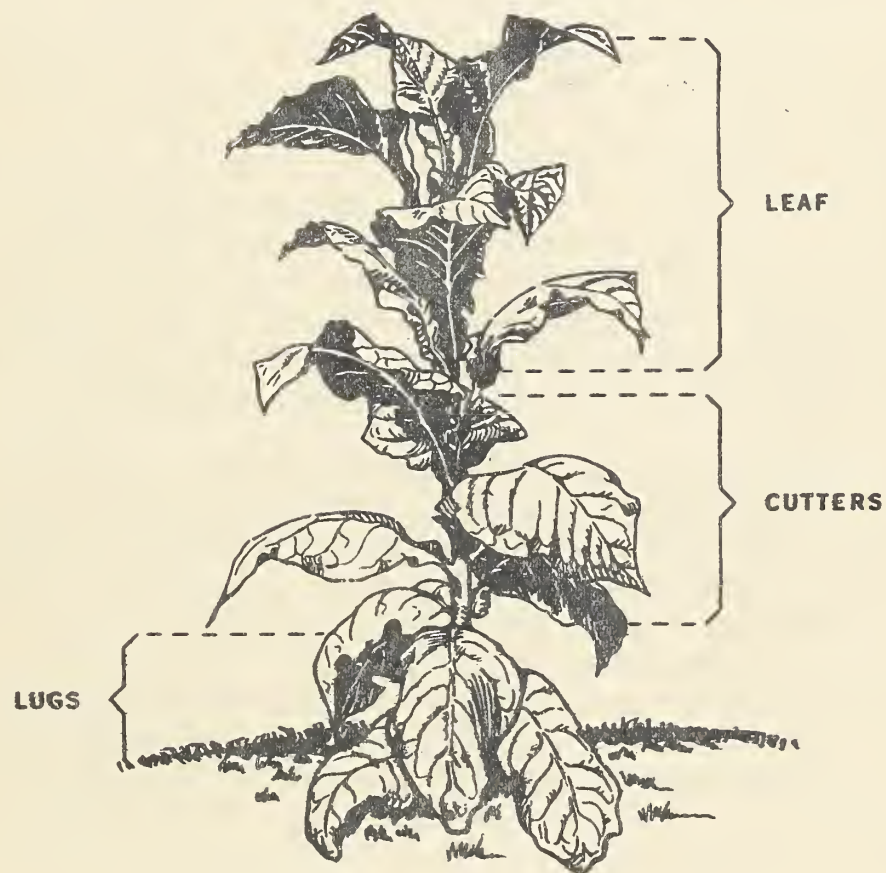


FIGURE 1.

FLUE-CURED TOBACCO PLANT

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FIGURE 2.- APPROXIMATE STALK POSITIONS OF THE VARIOUS GROUPS OF GRADES.

From Figure 2, it will be noted that the Lug group normally consists of those leaves at the bottom of the plant. Lugs are usually thin to medium in body and low in oil, and show a material amount of injury characteristic of leaves grown near the ground. Leaves of this group are shorter than other leaves on the plant except the top leaves. They usually have dull finish and lack the lively color characteristic of Cutters, and Choice and Fine quality Leaf. Lugs are made up of ripe, grainy lower leaves. The leaves at the very bottom of the plant are usually harvested before they are ripe. If left to mature they may be lost. These leaves as harvested are therefore premature; they lack grain, and are known in the trade as Primings. Primings are treated as a subgroup of Lugs. The chief differences between Lugs and Primings are: (1) Lugs are ripe whereas Primings are premature, (2) Lugs are grainy whereas Primings lack grain, and (3) Lugs have the sweet odor characteristic of Flue-cured tobacco whereas Primings have an earthy odor.

Cutters are the leaves on the plant next above the Lug leaves. Cutters are thin to medium in body. The leaves of this group are usually the longest and widest on the plant. They have light-color shade and vary in finish from bright to dull according to quality. Cutters are further distinguished from Lugs by being comparatively free from injury characteristic of leaves grown near the ground. The Choice and Fine qualities of Cutters are the smoothest leaves on the plant except Wrappers. Cutters are further distinguished by the wrinkled, crepe-like appearance of the leaf surface. In curing, leaves of the Lug and Cutter groups tend to roll up so that lots of Lugs and Cutters show, on inspection, very little of the stems or midribs.

Tobacco of the Leaf group is medium to heavy in body. Leaves of this group generally have a higher percentage of oil and wax (gum) than those of the Cutter group. Except those of Choice quality, the leaves of this group are narrower than Cutters and generally have larger stems (midribs) and lateral veins. Tobacco of this group usually is not so smooth as Cutters, does not have as light-color shade nor as high finish. In curing, leaves of this group normally fold flat, thereby showing prominently the stems or midribs. The leaf surface does not have the wrinkled, crepe-like appearance characteristic of Cutters. Tobacco of this group varies in maturity from ripe to fairly ripe according to quality. In some cases the leaves become over-ripe before being harvested.

Over-ripe leaf is of thinner body, has more prominent fibers, is non-elastic, low in oil, very grainy, porous, and shows a considerable amount of injury characteristic of leaves that have passed beyond the normal stage of maturity. Over-ripe leaf is described as smoking leaf and is treated as a subgroup of Leaf tobacco in the Flue-cured types. By weight, the Leaf group will usually comprise 50 percent or more of the crop.

Wrappers are selected from either Leaf or Cutters. Wrappers are those leaves that are silky to smooth, elastic, oily, ripe, firm, and strong. They have bright finish, blending fibers, and not more than 5 percent of injury. They are, therefore, almost perfect leaves. The main difference between Wrappers and Choice qualities of Leaf and Cutters is the degree of elasticity. Wrappers must be elastic whereas Leaf and Cutters of first quality need be only stretchy. Wrappers make up a selected group whereas Leaf, Cutters, and Lugs are natural groups which, under normal conditions, appear on all plants of Flue-cured varieties.

The group division is the first and basic factor of grades for tobacco. In examining Flue-cured tobacco the physical characteristics detailed above are used to determine the several groups. In addition to physical differences, there is, as shown by Darkis ^{1/} and his co-workers, a definite relationship between the chemical composition and the stalk position (group of tobacco). They have pointed out the correlation between the position of the leaves on the stalk (group) and the usage of Flue-cured tobacco in its manufactured forms.

The next subdivision divides each group into qualities. The terms used to describe quality are Choice, Fine, Good, Fair, Low, and Common. Each of these is based on a combination of elements that go to make up quality of tobacco.

In Flue-cured tobacco the final subdivision is on the basis of color. Each quality of the several groups is divided into colors as required. The terms used to describe color in Flue-cured tobacco are Lemon, Orange, Red, Dark-red, and Green.

The group, quality, and color are combined to form the grade which describes a lot of tobacco. Below are listed the groups, qualities, and colors used in grades for Flue-cured tobacco:

<u>Groups</u>	<u>Qualities</u>	<u>Colors</u>
Wrappers	Choice	Lemon
Leaf	Fine	Orange
Cutters	Good	Red
Lugs	Fair	Dark-red
Nondescript	Low	Green
Scrap	Common	

Any combination of group, quality, and color can be made to form a grade. For example, Cutters of Good quality in Orange color constitute a grade. As this method of expressing grades is too cumbersome for practical purposes, symbols are used for each group, quality, and color. This simplifies the use of this system of grades. The symbols and the words they stand for (groups, qualities, and colors for Flue-cured tobacco) are given as follows:

<u>Groups</u>	<u>Qualities</u>	<u>Colors</u>
A - Wrappers	1 - Choice	L - Lemon
B - Leaf	2 - Fine	F - Orange
C - Cutters	3 - Good	R - Red
X - Lugs	4 - Fair	D - Dark-red
N - Nondescript	5 - Low	G - Green
S - Scrap	6 - Common	

Substituting symbols for words, Cutters of Good quality in Orange color would be written C3F. The first symbol, C, indicates the group, the second symbol, 3, denotes the quality and the third symbol, F, describes the color. Each symbol used in a Federal grade for tobacco has therefore a definite and known meaning.

To make this clear, assume that we are to determine the grade of a single lot of tobacco. Upon examination we find that it is clearly a Lug, so we know that the first symbol of the grade should be "X". Examining it more closely we find that it is thin to medium in body, is fairly grainy, has a dull finish, and is unrough. This indicates it is a Good Lug, or in other words, third quality. If it had been thoroughly ripe, fairly smooth, and of normal finish, it would have been Fine or second quality. If it had been a smooth lug of clear finish and fairly oily, it would have been Choice or first quality. Going the other way, we might have found that this Lug was only Fair, or fourth quality; or just Common, or fifth quality. But taking all the factors into consideration we have found it to be Good or third quality, so we add a "3" as the second symbol and have "X3". This still is not complete for it does not indicate the Color. This particular lot we find to be a light or Lemon color, so we add the symbol "L" making it "X3L". Now we have a complete description of the tobacco. As we shall find later, it is possible to consult the market news reports and see what prices are being paid for other tobacco of the same description.

The Federal system of grades for tobacco differs from private systems in two respects. In the first place the Federal system is, and must be, more comprehensive since it must describe any and all lots of tobacco offered for sale, whereas any private system applies only to the grades of tobacco purchased by the particular firm that uses the system. In the second place, each grade symbol has a definite meaning which is known to the general public.

The above groups, qualities, and colors, in combination, do not always describe accurately a lot of tobacco that has some unusual characteristic or some particular phase of quality or color. To describe such lots of tobacco, special factors are used in addition to the usual grade symbols. For example, B4FW describes Leaf tobacco, of Fair quality, Orange color, in doubtful keeping order.

Figure 3 gives details of the groups, qualities, colors, and special factors used in connection with the grades for Flue-cured tobacco.

Farmers are sometimes confused by the fact that the several groups, qualities, colors, and special factors can be combined to form a large number of grades. They say that too many grades are recognized because the total number cannot be applied to their particular crops. It should be remembered that grades are used only as required. These farmers say that the Federal system uses many more grades than are used in private systems. This does not appear to be correct. For the week ending October 29, 1936, the tobacco sold on the market at Oxford, N. C., was classified into 83 Federal grades of which 20 lots or more were sold. During the same period one company used 127 grades to describe its purchases which did not include 25 percent of the tobacco sold during the week.

CLASSIFICATION OF TOBACCO, TYPES 11, 12, 13, 14

TOBACCO CLASS	CLASS 1	FLUE-CURED	TYPES	GROUPS	WRAPPERS (A-GROUP)												LEAF (B-GROUP)												CUTTERS (C-GROUP)												LUGS (X-GROUP)												NONDESCRIPT	SCRAP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
					11 (a) OLD BELT N.C. AND VA.			11 (b) MIDDLE BELT N.C. AND VA.			12 NEW BELT. N.C.			13 S.C. AND SOUTH- EASTERN N.C.			14 GA. AND FLA.			WRAPPERS (A-GROUP)			QUALITIES			1-CHOICE			2-FINE			3-GOOD			L-LEMON F-ORANGE R-RED OR MAHOGANY			SPECIAL FACTORS			T-SHORT WRAPPERS (3rd QUALITY) U-UNSMOKE W-DOUBTFUL KEEPING ORDER			LEAF (B-GROUP)			QUALITIES			1-CHOICE					2-FINE			3-GOOD			4-FAIR			5-LOW			6-COMMON			L-LEMON O-ORANGE R-RED OR MAHOGANY D-DARK RED OR WALNUT G-GREEN			SPECIAL FACTORS			K-VARIEGATED M-MIXED T-TIPS V-GREENISH TINGED U-UNSMOKE W-DOUBTFUL KEEPING ORDER			SUB-GROUP (H-SMOKING LEAF)			QUALITIES			1-CHOICE			2-FINE			3-GOOD			4-FAIR			5-LOW			6-COMMON			F-ORANGE R-RED OR MAHOGANY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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FIGURE 3.

Operation of Inspection Service

On markets where the inspection service operates, the procedure is as follows:

- (1) Growers deliver their tobacco to the market of their choice and to any warehouse they may select.
- (2) The tobacco is arranged for sale on flat baskets.
- (3) Each lot, or basket, is then weighed and a warehouse ticket is placed on the lot. The ticket shows the name of the seller and the number of pounds of tobacco in the lot, and may give other information for the purpose of identification. Space is provided on the ticket for the name of the buyer, the grade symbol of the buyer, and the price at which the tobacco is sold. It also has a space in the upper-right corner for the Federal grade (fig. 4).
- (4) The lots, or baskets, are placed in line on the warehouse floor.
- (5) As soon as there is good light, the official inspectors start at the beginning of the "break" ahead of the sale, and make a proper examination of each basket of tobacco.
- (6) Having made a careful examination, the inspector writes on the ticket, in the space provided, the Federal grade that correctly describes the tobacco in the lot, and signs his initials. If the tobacco inspected is Leaf of Fair quality in Red color, the inspector writes B4R. If the tobacco is made up of Cutters of Fine quality in Lemon color, the grade symbols are C2L. If the lot is made up of Lugs of Good quality in Orange color the grade mark is X3F. The warehouse ticket then becomes a certificate of grade and shows the type of tobacco as well as its group, quality, and color.
- (7) When the auction starts on each lot, the grade of the lot is announced for the information of all parties interested in the transaction.

Tobacco Market News Service

Farmers are primarily concerned with production. The preparation of tobacco for sale is a major part of tobacco production and requires much time. The average farmer cannot spend enough time on warehouse floors to keep posted on the approximate value of the different grades of tobacco. In the past, informational service has not been supplied growers to acquaint them with prices being paid for tobacco although this knowledge is essential to the equitable sale of their tobacco.

	BLANK'S		TOBACCO INSPECTION CERTIFICATE This tobacco inspected by the U. S. Department of Agriculture under the Tobacco Inspection Act, is certified to be:	
	No. <u>163</u>	Type 12		Grade _____
	Basket <u>23245</u>	By _____		(Date) _____ (Inspector) _____
	Planter <u>John Doe</u>			
	Price \$ _____	<u>204</u>	Lbs.	
	Buyer _____			

	BLANK'S		TOBACCO INSPECTION CERTIFICATE This tobacco inspected by the U. S. Department of Agriculture under the Tobacco Inspection Act, is certified to be:	
	No. <u>163</u>	Type 12 <u>X3F</u>		Grade _____
	Basket <u>23245</u>	By <u>MMV</u>		(Date) <u>11/7/36</u> (Inspector) _____
	Planter <u>John Doe</u>			
	Price \$ <u>20</u>	<u>204</u>	Lbs.	
	Buyer <u>St</u>	<u>X</u>		

FIGURE 4.- TOBACCO WAREHOUSE TICKETS:

UPPER - BEFORE INSPECTION AND SALE
 LOWER - AFTER INSPECTION AND SALE

Studies made by the Agricultural Marketing Service show that the greater part of the tobacco sold at auction is sold at prices within the normal range for each grade and are therefore in line with equitable prices as established by sales. The studies also show that some lots sell considerably higher than the normal price range for the grade, and about the same or a larger percentage sells in the price range of tobacco that is two qualities lower in grade. In both cases these prices are entirely out of line with equitable sales. In the one case the seller receives too much for his tobacco and in the other he receives far too little. It is therefore evident that whereas one grower, for some unexplained reason, is paid a premium for his tobacco another grower is likely to be penalized. It is this situation which causes so much dissatisfaction and which could be eliminated by proper and consistent use of the inspection service.

The value of the inspection service lies in the fact that the certificate of grade on the warehouse ticket provides tobacco growers with unbiased information regarding the grade or quality of each lot of tobacco offered for sale. In connection with the price reports, this information gives them a basis for making an intelligent decision on whether or not to accept a bid.

The tobacco market news service operates in connection with the inspection service. After a lot of tobacco has been sold, and has been so entered on the warehouse books, a coupon is taken from the warehouse ticket on each basket of tobacco. These coupons, showing the Federal grade and the price at which each lot has been sold, are forwarded to a central office where they are sorted according to grade and the price for each grade is calculated. These prices are then issued in the form of daily and weekly price reports (figs. 5 and 6, pages 13 and 14).

The combination of inspection service and market news service gives farmers information as to the grade of each lot of tobacco offered for sale and the average price at which each grade has actually been selling. The average price is ascertained by combining the prices of all lots of each grade and calculating the average for the whole number of lots sold. Some of the lots had probably been sold at prices above the average and others at prices below the average. Each grade will have a high side and a low side so that some range in price can be reasonably expected. Just how much variation there should be depends upon the spread in prices between grades. By turning to the weekly price report (fig. 6) it will be seen that the average prices for Lugs during that week were as follows: X1L, \$39 per 100 pounds; X2L, \$35; X3L, \$27; X4L, \$14; and X5L, \$7.75.

On the basis of these prices what would be the expected range in price of Lugs, Fine quality, Lemon color (X2L)? This is found by a simple calculation. There will be little difference in the prices for tobacco between the low side of X1L and the high side of X2L. The difference between the average prices of these two grades is ($\$39 - \$35 = \$4$) \$4. One-half of the difference is \$2. If \$2 is added to the average price of X2L ($\$35 + \$2 = \$37$) the high side of the grade should be worth approximately \$37 per hundred pounds.

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

Raleigh, N. C.
Nov. 2, 1936.

DAILY TOBACCO MARKET NEWS REPORT - TYPE 11(b)

The following table shows daily average prices for orange color grades in each group on the Oxford, N. C. Market Monday November 2. These average quotations are computed on the basis of a limited number of lots and are intended to reflect only the general trend of the market.

Orange Leaf		Orange Smoking Leaf		Orange Cutters		Orange Lugs	
U. S. Grade	Average	U. S. Grade	Average	U. S. Grade	Average	U. S. Grade	Average
	\$		\$		\$		\$
B1F	47.00	H1F	44.00	C1F	----	X1F	38.00
B2F	40.00	H2F	40.00	C2F	----	X2F	33.00
B3F	31.00	H3F	36.00	C3F	45.00	X3F	21.50
B4F	20.00	H4F	27.00	C4F	42.00	X4F	10.00
B5F	9.50	H5F	14.50	C5F	38.00	X5F	5.25
B6F	4.50	H6F	5.50				

Comments: Blocked sales. Offering chiefly second to fifth quality leaf and smoking leaf, third to fifth quality cutters and first to fourth quality lugs. Leaf (B group) predominated.

KEY TO STANDARD GRADE MARKS FOR FLUE-CURED TOBACCO

<u>GROUPS</u>	<u>QUALITIES</u>	<u>COLORS</u>	<u>SPECIAL FACTORS</u>
A - Wrappers	1 - First quality	L - Lemon	K - Off color
B - Leaf	2 - Second "	F - Orange	M - Mixed
H - Smoking Leaf	3 - Third "	R - Mahogany	T - Tips
C - Cutters	4 - Fourth "	D - Dark Red	V - Greenish Tinged
X - Lugs	5 - Fifth "	G - Green	U - Unsound
P - Priming Lugs	6 - Sixth "		W - Doubtful keeping order
N - Nondescript			

For example: B4F designates leaf, fourth quality, and orange color.

Issued 3:00 P. M.

(SEE OTHER SIDE FOR WEEKLY PRICE QUOTATIONS)

Figure 5. - Sample of Daily Price Report

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

Raleigh, N. C.
Oct. 31, 1936

WEEKLY TOBACCO MARKET NEWS REPORT - TYPE 11(b)

The following table shows average prices by grade for tobacco on the Oxford, N. C. Market this week and this season through Thursday October 29.

Averages Based on 20 or More Lots of Each Grade -
Price Quotations are in Dollars per 100 Lbs.

U. S. Grade	Week Ending Oct. 29 1936	Season Through Oct. 29 1936	U. S. Grade	Week Ending Oct. 29 1936	Season Through Oct. 29 1936	U. S. Grade	Week Ending Oct. 29 1936	Season Through Oct. 29 1936	U. S. Grade	Week Ending Oct. 29 1936	Season Through Oct. 29 1936
Wrappers		\$	Leaf Cont'd		\$	Cutters Cont'd		\$	Lugs Cont'd		\$
A2F	-----	52.00	B5FK	7.25	8.00	C2F	-----	50.00	X4L	14.00	15.50
Leaf	-----		B5FM	-----	9.25	C3L	46.00	45.00	X4F	12.50	12.50
B1L	50.00	50.00	B5FT	-----	8.50	C3F	45.00	44.00	X4R	9.00	9.00
B1F	47.00	46.00	B5FV	9.75	9.50	C4L	43.00	42.00	X4GL	-----	8.50
B1R	-----	45.00	B5R	8.00	7.50	C4LV	-----	35.00	X4GF	7.00	7.50
B2L	44.00	43.00	B5RK	-----	6.25	C4F	42.00	41.00	X5L	7.75	7.25
B2F	42.00	41.00	B5D	5.00	4.00	C4FV	-----	37.00	X5F	5.75	5.75
B2R	38.00	36.00	B5GL	8.75	8.25	C5L	40.00	39.00	X5R	4.50	4.75
B3L	38.00	36.00	B5GF	6.50	6.50	C5LV	34.00	32.00	X5GF	-----	3.75
B3LV	29.00	28.00	B6L	-----	6.50	C5F	39.00	38.00	Priming Lugs		
B3F	34.00	32.00	B6F	4.75	5.00	C5FK	-----	23.50	P1L	-----	37.00
B3FK	-----	18.00	B6R	3.50	3.50	C5FV	34.00	31.00	P1F	-----	35.00
B3FV	27.00	26.00	B6D	2.75	2.25	Lugs			P2L	32.00	32.00
B3R	30.00	27.00	B6GL	4.00	3.75	X1L	39.00	39.00	P2F	32.00	31.00
B3RK	-----	16.50	B6GF	3.25	3.00	X1F	39.00	38.00	P3L	23.50	23.00
B3GL	-----	21.50	Smoking Leaf			X1FV	-----	31.00	P3F	19.00	20.50
B3GF	-----	19.00	H1F	44.00	43.00	X1R	-----	34.00	P3G	-----	14.00
B4L	27.00	28.00	H1R	-----	41.00	X2L	35.00	35.00	P4L	14.50	12.75
B4LV	19.00	19.00	H2F	40.00	39.00	X2LV	29.00	29.00	P4F	9.75	10.25
B4F	22.50	22.00	H2R	38.00	37.00	X2F	34.00	33.00	P4G	-----	7.75
B4FK	12.00	11.75	H3F	35.00	34.00	X2FK	-----	20.50	P5L	-----	6.50
B4FM	-----	16.00	H3R	32.00	29.00	X2FV	30.00	27.00	P5F	5.00	5.25
B4FT	-----	16.00	H4F	26.00	25.00	X2R	29.00	29.00	P5G	-----	3.75
B4FV	19.00	17.50	H4R	21.50	20.00	X3L	27.00	27.00	Nondescript		
B4R	18.00	16.00	H5F	14.50	14.50	X3LV	23.00	20.00	N2B	1.75	1.75
B4RK	-----	9.75	H5R	11.00	10.75	X3F	25.00	24.50	N3B	-----	1.75
B4D	-----	8.75	H6F	6.75	6.50	X3FK	-----	14.00	N1X	3.00	3.00
B4GL	16.50	16.00	H6R	5.50	5.25	X3FM	-----	18.00	N2X	-----	1.75
B4GF	13.00	11.75	Cutters			X3FV	18.50	19.00	N2G	1.75	1.50
B5L	15.00	15.00	C1L	-----	57.00	X3R	18.50	18.00	N3G	-----	1.25
B5LV	11.75	12.25	C1F	-----	53.00	X3GL	17.00	15.50			
B5F	11.50	11.50	C2L	50.00	49.00	X3GF	11.50	13.00			

Comments: Heavy sales continued with market blocked on Monday and Tuesday. Bulk of offerings composed mainly of leaf, smoking leaf, and lugs. Offerings contained increased volume of leaf and smoking leaf, compared with volume of similar offerings for previous week. Third to sixth quality leaf (B group) predominated. Several lots choice wrappers sold from \$60.00 to \$65.00 and several lots choice and fine cutters from \$64.00 to \$70.00. Average prices continued firm, taken generally.

Likewise, the difference in price between X2L and X3L (\$35 - \$27 = \$8) is \$8. One-half of this is \$4. If \$4 is subtracted from \$35, the low side of X2L is found to be approximately \$31. At these prices X2L would have a range in price from \$31 to \$37 per hundred pounds. The range for other grades can be found in the same way.

This information will enable every farmer to know when his tobacco is sold whether the prices, lot by lot, are in line with those already established, on a grade basis, by the buyers. No further information is necessary to enable farmers to market their tobacco on a basis of fair competition.

The way in which this information is used determines its value to individual tobacco growers. Actual instances will provide the best illustrations. In the first instance, a farmer had several lots of tobacco inspected. Two lots were placed in the same grade by the inspector. When sold, both were bid in by the same buyer and placed in the same "company" grade. The price bid for one lot was \$28 per hundred pounds and for the other \$15 per hundred pounds. The first price was in line with the average for the grade and the second was far below the average. The farmer was dissatisfied but accepted the prices bid for both lots. Obviously the inspection and market news services were of no value to him because he made no use of the information supplied.

In the second case, a farmer had several lots of tobacco inspected. One lot of 250 pounds was bid in at \$22.50 per hundred pounds which was materially below the average price for the grade. The bid was rejected and the lot was resold at \$40 per hundred pounds. This price was above the average for the grade and was accepted. This farmer profited from the services because he used the information as it should be used.

Instances could be cited at length. The point is that if farmers are to benefit from the inspection service and market news service they must apply the information obtained. No one can successfully refute the statement that information that enables farmers to reject abnormally low bids and resell their tobacco at substantially higher prices is of great potential value in marketing tobacco.

The services can also be used to prevent rejections when bids are equitable, as indicated by the sale of tobacco of the same grade. Usually when the price bid is equal to or higher than the average shown for the grade in the price report, rejection is unwise, and often leads to disappointment as well as loss of money by the farmer.

In brief, then, these services are designed and operated to supply tobacco growers with information that will enable them to sell their crop at the highest prices consistent with quality and market requirements.

Why the Government Acts

It may be asked, Why cannot warehouse starters and buyers determine the grade of tobacco as well as Government inspectors? Studies show that in the majority of cases they can, and do, since the bulk of sales are made at prices within the normal range for the several grades. But there are the sales at abnormally low prices to be explained.

One explanation may be found in the rate at which tobacco is sold at auction. The normal rate at which flue-cured tobacco is auctioned is 360 lots an hour, or 1 lot for each 10 seconds. When sales are unusually heavy the rate is faster and when sales are light the rate is slower. Under normal conditions the warehouse starters and buyers must determine the group, quality, and color of a lot of tobacco every 10 seconds. It is extremely doubtful whether these determinations can be accurately and consistently made at this rate of speed during the whole period of sales and under varying light conditions. To a large extent the inequality in prices for the same grade of tobacco may be explained by errors in judgment on the part of starters and buyers, because of the speed at which tobacco is sold.

Another important factor is the light under which tobacco is sold. Some tobacco may be placed on the warehouse floor where the light is unsatisfactory. It may be in a dark corner, or under a skylight through which the sun shines directly on the tobacco. Both conditions render accurate determinations very difficult, and often adversely affect the sales price of tobacco. Neither of these unfavorable conditions - rate of sales or unfavorable light - can be directly attributed to either the starters or the buyers, but the ill effects of both can be reduced materially by inspection service.

Under Federal inspection, to eliminate errors in judgment caused by speed and unfavorable light, at least three inspectors are provided for each sale and during rush sales four inspectors are required. Furthermore, as they begin inspecting tobacco some time before the sale starts they are not rushed and are able to make more thorough examinations, and consequently more accurate and consistent determinations of grade, lot by lot. In addition, samples of those lots of tobacco under unsatisfactory light can be carried to proper light for inspection and determination of grade.

Question of Prices

Farmers frequently ask whether the price of tobacco is increased through the operations of the inspection and market news services.

In certain instances the price is increased and in others it is not. The value of tobacco is determined by the soil and climate under which the tobacco is grown, the cultural practices used, the stage of maturity at which the tobacco is harvested, the skill with which it is cured, and the way in which it is prepared for market. The grade mark should be an index to market price, as it describes the group, quality, and color that have resulted from the factors mentioned. In the case of those lots of tobacco that sell within the price range for their grade or higher, it can be assumed that the tobacco is selling at or above established values and that the grade announced has not increased the selling price.

But there are exceptions. Sometimes the announcement of the grade may attract attention to a lot which otherwise would be overlooked; in such cases prices are thereby directly increased. In the case of lots that are bid in at prices materially below the average for their grade, the price can be materially increased by the proper use of the information supplied by the inspection and market news services. If the bids are rejected and the tobacco is resold, the lots generally sell within the price range for their grades and the sales price is materially increased in such cases.

Farmers should realize that both services are informational. The inspection service does not promote sales. The market news service does not establish prices; it only records current average prices established by sales of tobacco. If the service is properly used it will go far toward preventing the losses now suffered by growers through tobacco that is knocked down at less than its current market value. If the information is not applied it will have no influence on prices.

Farmers often say that the services have helped them, when their tobacco sells at average prices or higher per grade, as shown in the price reports. This is especially true when the grades assigned to lots are higher than the farmers expected. On the other hand, they are prone to complain that the services have been of no value when their tobacco is bid in at prices below the averages for the several grades.

Such conclusions are not entirely justified. It is often true that the announcement of the grade to the buyers helps the sale, but it is also true that in many cases, possibly in most cases, the price would have been about the same even if the tobacco had not been inspected. The important point to bear in mind is that the object of inspection and market news services is to let the farmer know whether the price offered is right or whether it is too low. The tobacco probably would have sold at the same price if it had not been inspected so that direct assistance cannot be attributed to the inspection service. Conversely, when tobacco is inspected and the lots are bid in at prices materially below the averages for their grades, farmers are disappointed and inclined to find fault with the inspection service. In the latter case they have unbiased information that their tobacco has been undersold. The trouble here is not with the service but with themselves. The service made it possible for the farmers to know that they were not getting a fair price for their tobacco, but they failed to use the information.

This kind of information can now be obtained only through the inspection and market news services. If used properly it is of direct commercial value to farmers but if it is ignored the benefits of the inspection and market news services are largely lost.

In addition to the practical benefits that individual growers should derive from inspection and market news services, it has often been found that these services contribute to smoother running sales and a more even market.

